cont A5

an output of the current absorbing circuit being connected to the output of the voltage converter circuit.--

REMARKS

The application has been amended to be in condition for allowance at the time of the next Official Action.

Claims 1-10 are pending with claims 1, 4, and 7 being independent.

The specification has been amended as to form.

The claims have also been amended as noted below.

The Official Action rejected claims 1-10 under §112, first paragraph, as not being enabled.

The Official Action stated that the specification failed to adequately disclose how to make and use the claimed circuit. Applicant respectfully disagrees.

Although the particulars for each circuit module are not detailed, these modules are known in the prior art and the invention lies in the combination thereof. The modules used in the inventive circuit, their operation, and their operative connections are disclosed so as to enable one of skill in the art to make and use the invention. That is all that is required by §112, first paragraph, as the invention is not in the circuitry of the individual modules but in the recited combination producing the inventive DC stabilized power supply.

As to converter circuit 11, see specification page 8, beginning at line 20 stating that the converter circuit is

composed to convert an inputted DC power supply voltage into a predetermined DC voltage. Applicant believes that this description would be appreciated by one of skill in the art as a DC-DC converter. The sentence has been amended to make this explicit. The claims have also been amended to explicitly recite a DC-DC voltage converter circuit.

To paraphrase the Official Action, since the elements disclosed are known in the art, specific circuit disclosure concerning the elements is not necessary.

With respect to claims 1-3, the Official Action objected to the second differentiating circuit and the current injection circuit, as well as the related circuit connections being omitted from the claim recitations. The Official Action stated that these are critical or essential to the practice of the invention. A similar objection is made as to claims 4-6 omitting the first differentiating circuit and the current absorbing circuit.

For claims 7-10, the Official Action objected to the connection of the output of the absorbing circuit and the output of the converter circuit not being recited.

The independent claims have been amended to recite the outputs of the absorbing circuit, the injecting circuit, and the DC-DC voltage converter circuit being connected (as appropriate for the specific claim).

However, claims 1-6 are believed to be proper as the recited elements concern an arrangement enabled by the disclosure and will work as recited, absent the omitted elements. Granted, the addition of the omitted elements comprise a preferred embodiment, but the recited elements alone are believed to be enabled.

In view of the above, reconsideration and withdrawal of the enablement rejection are solicited.

Claims 1-10 have been rejected under §102 as anticipated by DOLUCA et al. 4,769,784.

As DOLUCA et al. is not believed to disclose the recited features of the amended claims, withdrawal of the anticipation rejection and allowance of the claims are respectfully requested.

As outlined in the DOLUCA et al. abstract, the reference discloses a capacitor-plate bias generator producing a voltage on the capacitor plate node which consists of a constant voltage plus the sense-level voltage where the capacitor-plate node tracks any variations in the sense-level voltage.

This circuit includes a reference-voltage source and a feedback control circuit for enabling either a charge pump or a charge bleeder to regulate the capacitor-plate voltage at a level above the circuit supply voltage.

DOLUCA et al. do not disclose the recited DC-DC voltage converter circuit for converting an inputted DC power supply

voltage into a predetermined DC voltage supplied on an output of the converter circuit. For support of this recitation, see at least the last full paragraph of specification page 9.

DOLUCA et al. rather, in Figure 2, show a circuit arrangement providing a capacitor-plate bias to establish and maintain a voltage on the Figure 1 capacitor-plate nodes.

The Official Action offered DOLUCA et al. Figure 3 as the recited converter circuit, Figure 2 elements 39 and 43 as the recited first differentiating circuit, Figure 2 element 45 as the current absorbing circuit, Figure 2 elements 31 and 35 as the recited second differentiating circuit, and Figure 2 element 37 as the recited current injection circuit.

This characterization is not believed to be viable as Figure 3 does not teach a converter circuit those variations in output voltage are differentiated by Figure 2 elements 39/43 or Figure 2 elements 31/35.

See DOLUCA et al. column 2, lines 54-55, indicating that Figure 3 is a schematic representation of a charge pump (i.e., charge pump 37 of Figure 2). See also beginning at line 19 of column 5, disclosing that Figures 3-4 show a circuit realization of charge pump 37 including a pump clock generator 47, represented in schematic-block form.

Since Figure 3 depicts the charge pump 37, there is no disclosure of a converter circuit connected to first and second differentiating circuits and variations of the converter circuit

output voltage being therein differentiated.

The patent teaches that the function of the circuitry of Figure 2 is the utilization of V(REF) to establish and maintain a voltage on line 19 of VCC/2+K. The method of doing this involves the periodic pumping of charge into line 19 to raise its potential and the periodic bleeding of charge from line 19 to lower its potential.

There is disclosed a bleeder control circuit 27 comprising elements 45 which circuit controls a bleeding of charge from the line 19. There is also disclosed a pump control circuit 29 comprising element 37 (charge pump 37) which circuit controls the pumping of charge onto line 19.

However, these circuits are not as recited and therefore do not anticipate.

As disclosed by DOLUCA et al., each of circuits 27 and 29 uses a scheme which may be summarized as deriving a voltage which is a certain fraction of the voltage on line 19, comparing this voltage with the V(REF) voltage on line 25, and turning the charge pump or charge bleeder on or off in response to the difference between these two voltages.

This disclosure of DOLUCA et al. is not that recited by the independent claims, i.e., differentiating variations in the converter output voltage and driving a current absorbing circuit or a current injecting circuit based on an output voltage of the differentiators.

In view of DOLUCA et al. not disclosing each recited feature of the independent claims, the anticipation rejection should be withdrawn and the claims allowed.

The dependent claims are believed to be allowable at least for depending from an allowable claim. Further, the features of the dependent claims are not anticipated.

The recited connections concerning the control signals (claims 2-3, 5-6, and 8-10) are not disclosed by DOLUCA et al.

Based on the above, applicant believes that the present application is in condition for allowance and an early indication of the same is respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Respectfully submitted,

YOUNG & THOMPSON

By _____

Roland E. Long, Jr.
Attorney for Applicant
Registration No. 41,949
745 South 23rd Street
Arlington, VA 22202
Telephone: 521-2297

March 10, 2003

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

IN THE SPECIFICATION:

Page 8, the paragraph beginning on line 20 has been amended as follows:

--The above-mentioned converter circuit 11 is composed to convert an inputted DC power supply voltage into a predetermined DC voltage, i.e., is a DC-DC converter.--.

Page 9, the paragraph beginning on line 7 has been amended as follows:

--The output voltage of the converter circuit 11 is also inputted to the second differentiating circuit 14. The second differentiating circuit 14 thereby outputs an output voltage corresponding to fluctuations of the output voltage of the converter circuit 11. That is, the fluctuations of the output voltage of the converter circuit 11 become larger, change of the output voltage of the second differentiating circuit 14 becomes greater.--.

IN THE CLAIMS:

Claim 1 has been amended as follows:

--1. (amended) A DC stabilized power supply for use in converting an inputted DC power supply voltage into a predetermined DC voltage, comprising:

a DC-DC voltage converter circuit for converting an inputted DC power supply voltage into a predetermined DC voltage

supplied on an output of the converter circuit;

a first differentiating circuit for differentiating variations in an output voltage of said converter circuit; and

a current absorbing circuit driven by an output voltage of said first differentiating circuit,

an output of the current absorbing circuit being connected to the output of the DC-DC voltage converter circuit.--

Claim 4 has been amended as follows:

--4. (amended) A DC stabilized power supply for use in converting an inputted DC power supply voltage into a predetermined DC voltage, comprising:

a DC-DC voltage converter circuit for converting an inputted DC power supply voltage into a predetermined DC voltage supplied on an output of the converter circuit;

a second differentiating circuit for differentiating variations in an output voltage of said converter circuit; and

a current injecting circuit driven by an output voltage of said second differentiating circuit,

an output of the current injecting circuit being connected to the output of the DC-DC voltage converter circuit.--

Claim 7 has been amended as follows:

--7. (amended) A DC stabilized power supply for use in converting an inputted DC power supply voltage into a predetermined DC voltage, comprising:

a DC-DC voltage converter circuit for converting an

inputted DC power supply voltage into a predetermined DC voltage supplied on an output of the converter circuit;

a first differentiating circuit for differentiating variations in an output voltage of said converter circuit;

a current absorbing circuit driven by an output voltage of said first differentiating circuit;

a second differentiating circuit for differentiating variations in the output voltage of said converter circuit; and

an current injecting circuit driven by an output voltage of said second differentiating circuit,

an output of the current injecting circuit being connected to the output of the DC-DC voltage converter circuit, and

an output of the current absorbing circuit being connected to the output of the voltage converter circuit.--